

Serial No.: 10/628,692  
Art Unit: 1651

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

**Claim 1. (Currently amended)** A bone repair material, comprising:

a porous, resorbable particulate derived of anorganic bone mineral or natural bone-like-mineral bone derived material or synthetic hydroxyapatite in a concentration of at least about 50 weight percent of said material; and

a resorbable carrier gel component for suspending said particulate, forming a putty-like formulation, for placing in a bony defect, said gel component having a sufficiently high molecular weight and concentration in the putty wherein ~~concentration of the~~ particulate-material is sufficiently high such that bone repair is facilitated while migration and expansion of said material particulate is minimized.

**Claim 2. (Original)** The bone repair material of claim 1 wherein said resorbable particulate is bovine derived having a particle size range of 250 to 1000  $\mu\text{m}$ .

**Claim 3. (Original)** The bone repair material of claim 1 wherein said resorbable particulate is a porous hydroxyapatite derived from lime-containing algae, having a particle size range of 300-1000  $\mu\text{m}$ .

**Claim 4. (Original)** The bone repair material of claim 1, wherein said carrier gel component comprises a polysaccharide.

**Claim 5. (Currently amended)** The bone repair material of claim 4, wherein said carrier material gel component is hyaluronic acid or its derivatives, or hydroxypropyl cellulose or mixtures thereof.

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**Claim 6. (Original)** The bone repair material of claim 5, wherein said carrier gel component is hyaluronic acid or its derivatives having a molecular weight of  $0.7-2.0 \times 10^6$  daltons and a final concentration of 45-64 mg/cc in the putty.

**Claim 7. (Currently amended)** The bone repair material of claim 1, further comprising a at least one P-15 synthetic biomimetic, polypeptide sequence of Type I collagen, having at least one of the poly-peptide sequences as claimed in U.S. Pat. No. 5,635,482, bound to said particulate.

**Claim 8. (Currently amended)** A bone repair material for dental bone repair procedures, comprising:

a porous, synthetic, resorbable, bone-like hydroxyapatite or anorganic bone derived particulate, in an amount of at least about 30-75 50 weight percent of said material; and

a hyaluronic acid gel in an amount of about 25-70 weight percent of said material, wherein said material is a moldable, cohesive putty for application to bony defects; ~~said amount of particulate present dependent upon its density.~~

**Claim 9. (Currently amended)** The bone repair material of ~~claim 7~~ claim 8, wherein said particulate has a bulk density of 1.1 to 1.3 g/cc and the putty composition comprises about 50-60 weight percent particulate and about 40-50 weight percent hyaluronic acid gel.

**Claim 10. (Currently amended)** The bone repair material of ~~claim 7~~ claim 8, wherein said bone repair material comprises about 55 weight percent particulate and about 45 weight percent hyaluronic acid gel.

**Claim 11. (Currently amended)** The bone repair material of ~~claim 7~~ claim 8, wherein said particulate has a bulk density of 0.45 to 0.65 g/cc and the putty composition comprises 35-40 about 55 weight percent particulate and 60-65 about 45 weight percent hyaluronic acid.

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**Claim 12. (Currently amended)** The bone repair graft material of claim 4, wherein said carrier is a hydroxylpropyl cellulose or methyl cellulose gel forming a moldable, cohesive putty.

**Claim 13. (Currently amended)** The bone repair material of claim 8 further comprising at least one of a P-15 polypeptide sequence of collagen as claimed in U.S. Pat. No. 5,635,462, bound to xenogenic bone mineral particulate of about 200-500 nm in diameter, suspended in said gel carrier, said material having a putty-like consistency.

**Claim 14. (Currently amended)** The bone repair material of claim 3 further comprising at least one of a P-15 polypeptide sequence of collagen as claimed in U.S. Pat. No. 5,635,462 and continuations thereof, bound to porous hydroxyapatite derived from lime containing algae of about 300-1000  $\mu$ m in diameter suspended in hydroxylpropyl cellulose or hyaluronic gel carrier, said material having a putty-like consistency.

**Claims 15-18 (Canceled).**

**Claim 19. (Currently amended)** The bone repair material of claim 7, wherein the concentration of PEPGEN-P-15 P-15 synthetic biomimetic, polypeptide sequence of Type I collagen in the putty is at least about 800 mg/cc.

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